

2008-2009 ACADEMIC YEAR COURSE OVERVIEW

8th GRADE CURRICULUM (Class of 2013)

Religion 8
English I
Algebra I
Computer Technology Applications (½ credit)
Physical Science
French I/Spanish I/Latin I
Health & PE 8 (½ credit)
Dynamics of Effective Study (½ credit)
Fine Arts Survey (½ credit)

9th GRADE CURRICULUM (Class of 2012)

Religion I
English I or II
World Geography
Algebra I or Geometry
Computer/Technology Applications (½ credit)*
Biology
French I/II, Spanish I/II, Latin I/II
Health & PE I, Part I (½ credit)
Fine Arts (½ credit elective of your choice*)
*Computer Tech Applications (required for all students who did not attend Mount Carmel Academy's 8th grade)

10th GRADE CURRICULUM (Class of 2011)

Religion II
English II or III
World History
Geometry or Algebra II
Chemistry
French II/III, Spanish II/III, Latin II/III
Family & Consumer Sciences (½ credit)
Health & PE I, Part II (½ credit)

11th GRADE CURRICULUM (Class of 2010)

Religion III
English III or IV
American History
Algebra II/Advanced Math
Physics
Health & PE II, Part I (½ credit)
Electives: 1 ½ credits from course descriptions list

12th GRADE CURRICULUM (Class of 2009)

Religion IV
English IV or V
Civics
Economics (½ credit)
Probability & Statistics/Advanced Math/Calculus
Health & PE II, Part II (½ credit)
Electives: 2 full credits from course descriptions list

COURSE DESCRIPTIONS

BUSINESS EDUCATION

Accounting I (1 credit) (Elective)

This course is made available to seniors and juniors. The course exposes the student to basic accounting theory and practice.

Following a study of accounting theory in the first semester, the student is allowed to apply her knowledge by working a practice set. This set puts the student in the place of an actual accountant; thus, she performs all the record keeping tasks necessary in a real business.

Practical aspects of record keeping such as personal finance, budgeting and income taxes are incorporated into the course at appropriate times and serve to enrich the course content.

COMPUTER SCIENCE

Computer Applications Part 1 (½ credit) (Required)

This one-half credit required course taken at the entry level, is designed to introduce students to the Mount Carmel LAN, to teach basic productivity tools, and to assist with their researching needs. The class incorporates Microsoft® Windows training, social and ethical practices, hardware/software terminology, network login and resources, evaluation of Internet sites and acceptable use of the Internet, searching techniques for the Internet, word processing, advanced draw and paint program use, creation of a personal web page, and presentation graphics training.

Computer Applications Part 2 (½ credit) (Elective)

This course instructs students in the use of spreadsheets, database, and desktop publishing applications. Students will enhance their computing knowledge and skills while meeting state technology standards by creating and working with Excel worksheets, charts, functions, formulas, and what-if analysis. In addition, they will explore the database management features of Access by designing, querying, and maintaining databases. Students will integrate appropriate productivity tools. After creating flyers, newsletters, and brochures with Microsoft Publisher, students will conclude the course by applying their desktop publishing skills to the production of an original tri-fold brochure illustrating the techniques discovered in class.

Computer Science I (½ credit) (Elective)

In this one-half credit elective course, students become skilled in Visual Basic programming. Students write event-driven application programs using common features in Windows. They design forms, create variables, import graphics, design menus, and plan solutions to problems. As the course progresses, students create programming loops, arrays, and functions. In the final project, students design a game

program that interacts with the user in a question/answer environment.

Computer/Technology Applications is a pre-requisite.

Web Mastering (½ credit) (Elective)

Concepts of web communication will be studied and explored. Students will design, develop, and maintain web pages using appropriate current editors and/or tagging languages. Students will demonstrate technical knowledge of the equipment and an ability to use a variety of input devices, file formats and transfer methods. Students will use graphics, images, and/or video to create content-oriented web presentations. The media used within these presentations will be developed, edited, or otherwise manipulated by the students. Students will gain proficiency in the use of digital graphics software, including digital photographic editing. Career possibilities related to the Internet and web design will be explored.

ENGLISH

One full credit in English is required each year.

English I (1 credit)

This course is an introduction to basic high school English skills. The course encompasses the development of basic composition skills, the use of expanded vocabulary, and the exposure to various literary genres. The students will be expected to write narrative and expository essays and will be required to complete a researched essay.

English I Honors (1 credit)

This honors course is an in-depth study of basic composition skills with emphasis on paragraph development and use of an expanded vocabulary. The student is introduced to various writing techniques, including but not limited to, descriptive, persuasive, and comparison/contrast. Each student will be required to do a researched composition.

English II (1 credit)

This course builds on and refines the basic skills taught in English I. Students are introduced to the concepts of unity, coherence, and conciseness in their written work. Students are introduced to the multi-paragraph essay. Vocabulary enrichment and an emphasis on grammar skills is encouraged. Each student is required to complete a researched essay.

English II Honors (1 credit)

English II Honors is a continuation of English I Honors, emphasizing paragraph development and the multi-paragraph essay and its construction. In writing, unity and coherence are strongly emphasized, as well as an expanded vocabulary and correct grammar. Students explore various literary genres in great depth and write analytical essays on a range of topics related to each

genre. In addition, each student is required to complete a researched literary analysis.

English III (1 credit)

This course is a historical survey of American literature. Students study techniques for various different rhetorical modes of expository writing as well as for writing about literature. Vocabulary enrichment and an emphasis on grammar skills is enhanced. Each student is required to write a researched essay on a literary piece.

English III Honors (1 credit)

This honors course is a historical survey of American literature in which students read, discuss, analyze, and interpret the works of different literary periods. Each student's style and writing voice are stressed within several critical essays. Both vocabulary enrichment and grammar skills are emphasized; students are expected to integrate these skills into their writings. A researched literary analysis is mandatory for all students.

English IV (1 credit)

This course is a historical survey of British literature. The revising and editing process is stressed in writing, along with concentration on word choice and sentence construction. Vocabulary enrichment and grammar skills are emphasized, and every student is required to write a researched argumentative essay.

English IV Honors (1 credit)

This honors course is a historical survey of British literature emphasizing the interpretation and analysis of the various works of each time period. Diction and syntax are emphasized in writing, as well as the further development of each student's style and writing voice. Vocabulary enrichment and grammar skills are required. Every student is also required to write a researched argumentative essay.

English IV Advanced Placement Program (1 credit) Literature & Composition (Honors)

The Advanced Placement Program of Literature and Composition includes the equivalent of a full year college course and prepares the student for the Advanced Placement Examination given in May. Representative works from various genres and periods from both the English and American traditions, and from various periods beginning with the sixteenth century are studied in depth.

English V (1 credit)

This course involves the study of literature by a variety of American authors whose works were written from the early 1900s to the present. Grammar skills and vocabulary enrichment are emphasized. Writing in a variety of genres allows students to develop their

own unique writing style and voice. In addition, students are required to write a researched essay.

English V Honors (1 credit)

This course involves the analysis and interpretation of literature by a variety of American authors whose works were written from the early 1900s to the present. Grammar skills and vocabulary enrichment are emphasized. Writing in a variety of genres allows students to develop their own writing style and voice. In addition, students are required to write a researched essay.

English V Advanced Placement Program (1 credit) Language and Composition (Honors)

The Advanced Placement Program of Language and Composition includes the equivalent of a full term college course and prepares the student for the Advanced Placement Examination given in May. This course focuses on the mastery of advanced writing skills, which includes the mechanics of language usage in the development of polished essays. Selections from a variety of authors are used as models to reflect the professional structure and usage of language.

English Electives

Creative Writing (½ credit) (Elective)

This course will provide students an opportunity to study their artistic qualities of literature in order to create their own works of short fiction, poetry and creative non-fiction. The course will foster an appreciation of literary art as well as an understanding of the ways in which such art is made. Students will learn how to create, revise, and discuss their own writing. Students should have prior exposure to a variety of literature as well as a firm understanding of key grammatical and literary concepts and terms. **Prerequisite: English III**

Journalism (½ or whole credit) (Elective)

Are you the next Lucy Bustamante? Of the future editor of *The New York Times*? This class is a unique opportunity to gain experience in both broadcast and print journalism. Students will learn the fundamentals of journalistic writing in a workshop-style setting and have the opportunity to showcase their work in both the school newspaper, *Echoes of Carmel*, and WMCA, Mount Carmel Academy's closed-circuit television station. This team-taught class offers hands-on training with sophisticated technology use in newsrooms across the country. Reporting opportunities will take students outside the classroom to cover exciting school events and activities. This class is open to next year's 9th and 11th graders.

FAMILY AND CONSUMER SCIENCES Family and Consumer Sciences (½ credit) (Required)

The Family and Consumer Sciences curriculum is a one-half credit graduation requirement for all Mount Carmel Academy students.

Family and Consumer Sciences is an integrated discipline which helps a student to develop life skills. The student will learn the value of being a wise consumer and will become aware of the necessities placed on the individual today in the areas of Housing & Interior Design, Food & Nutrition, and Clothing & Textiles.

Family and Consumer Sciences (Electives)

To enroll in any Family & Consumer Sciences elective students must complete the Family & Consumer required course above.

Semester elective courses in Family & Consumer Sciences are offered stressing an integrated consumer approach. The student becomes more specialized through the learning of advanced techniques and procedures.

(1) Interior Design (½ credit) (Elective)

The Interior Design curriculum offers an in-depth view of decorating. The student will study architecture and housing styles. Studies in American furniture styles, use of lighting, color design, texture and pattern will be applied to a decorating and design project. Consumer awareness is emphasized throughout the housing study.

(2) Food and Nutrition (½ credit) (Elective)

The student will study nutrition with a personal emphasis in the area of fats and cholesterol. Each student is encouraged to be knowledgeable of new research in the field of nutrition and its relevance to the consumer.

The student participates in studies in special preparation skills and techniques as well as studies in foreign food cooking. Studies in the areas of food additives, food labeling, supermarket strategies and large group entertaining help the student to become a more astute consumer and skillful hostess.

(3) Child Development (½ credit) (Elective)

This course will provide students with an understanding of the aspects of human growth and development of young children. Parenting skills will be developed as positive guidance techniques and child-related issues are studied. Learning activities, observation techniques, and lab experiences in working with young children will be included. Students will also be introduced to various careers related to the Child Development field.

FINE ARTS

Art

Art I—Painting and Drawing I (½ credit) (Elective)

Art I is designed to teach students the basic application of the elements of art and the principles of design. Students will develop skills in producing visual art in a variety of media and techniques as well as develop creative problem solving skills. Students will learn to evaluate art of self, other students, and differing cultures and historical periods. Students will draw from direct observation, maintain a sketchbook, and develop a portfolio during the semester. Art I students participate in an art exhibit at the end of the course.

Art II—Painting and Drawing (½ credit) (Elective)

Completion of Art I is a pre-requisite to Art II. Students will apply their knowledge of the elements of art and principles of design and continue to explore a variety of media and techniques. Students will continue to develop creative problem solving skills and engage in forms of higher level thinking that fosters creative risk taking. Students will draw from direct observation, maintain a sketchbook, develop a portfolio, and participate in class critiques. Art II students participate in an art exhibit at the end of the course.

Art III (½ credit) and Art IV (½ credit) (Elective)

Art III and Art IV are designed to continue in-depth study of visual art. Students will apply their knowledge of the elements of art and the principles of design. Students will continue to draw from direct observation, maintain a sketchbook, and develop a portfolio. Students will be expected to be creative risk takers and to engage in forms of higher level thinking in the development of their artwork. Art III and Art IV students participate in an art exhibit at the end of the course.

Music

Beginning Choir (½ credit) (Elective)

Students in grades 10, 11, and 12 may take Beginning Choir which is a semester-long class. Students learn to sing two-part harmony, learn basic music theory, and are introduced to music history. As a culmination of the semester's work, students participate in either the Christmas Concert or the Spring Concert.

Advanced Chorus (½ credit or 1 credit) (Elective)

Students who have taken Beginning Choir, are members of Chorale, or who have demonstrated musical excellence may take Advanced Chorus for either one semester or for an entire year. The basic concepts begun in Beginning Choir are continued, and students sing in three parts. Students may participate in Large Ensemble Festival and District Honors Chorus.

Theatre

Fine Arts Survey (1 credit or ½ credit) (Elective)

The Fine Arts Survey course is designed to be an overview of the arts, their relationships and how they affect our daily lives. Art history and appreciation, applied art, and critique are all included from the viewpoint of aesthetics. These arts include visual arts, music, dance, and theatre.

This course is offered as a one-half or full credit elective. **For those students applying for the Louisiana Tuition Assistance Plan, a full credit in this course is now required in Louisiana.**

Speech I (½ credit) (Elective)

Speech class is a practicum class where the students are taught the basics of public speaking and are required to write and present their speeches in front of a forum designed to pinpoint their strengths and eliminate their weaknesses. A class fee of \$10 is required.

Television Production, Part 1 (½ credit) (Elective)

Television Production, Part I allows students, in a practicum class setting, to learn the basic ins-and-outs of television production including camera work, editing, graphics, animation, and running all aspects of a television studio. They will also run the weekly television news program on WMCA. This class will strive to prepare the students for work in major professional stations. There is a \$25 course fee required plus three high quality VHS T-120 video cassette tapes.

Television Production, Part 2 (½ credit) (Elective)

Television Production, Part 2 is a class wherein, using the skills and techniques learned in Mass Communications I, students will put together video projects such as commercials, movie videos, narrative videos, news packages, documentaries, etc. Students will be in charge of writing, directing, shooting, editing, and using sound and graphics. Students are graded on their participation in and quality of individual and group projects. **Prerequisite: TV Production I.** There is a \$25 course fee required plus three high quality VHS T-120 video cassette tapes.

Acting, Part 1 (½ credit) (Elective)

Acting, Part I is a class wherein students learn about the varied aspects of the musical theatre genre. Theatre and acting techniques will be studied in addition to viewing a series of productions spanning the history of the musical in America from its beginning to present. Composers, directors, choreographers, performers, and audition techniques will be highlighted. The class will culminate with the students performing in a scene in a major musical or

a mini-musical production for their final grade. A class fee of \$20 is required.

Acting, Part 2 (½ credit) (Elective)

Acting, Part 2 continues to span history, but begins to focus on specific composers, lyricists, directors, and choreographers. Advanced theatre and acting techniques are continued.

Dance
Basic Tap (½ credit) (Elective)

Simple key techniques, basic exercises and movements will be used, plus a variety of rhythmic patterns, fundamental steps and graded routines. Course includes a brief history of tap, choreographic principals and improvisation. Shuffles, ball changes, heel drops, time steps, flaps and beginning turns are introduced.

Advanced Tap (½ credit) (Elective)

Key techniques, advanced exercises and movement patterns will be used, plus a variety of rhythmic patterns, time steps and graded routines. Course includes a brief history of tap, choreographic principals and improvisation. Interested students should be able to do single, double pullbacks; graboffs; and at least, 10 different time steps.

FOREIGN LANGUAGE

Three full credits of Foreign Language are required effective with the class of 2007. For those students who entered ninth grade with one credit in Foreign Language, two additional credits in the same foreign language are required.

Spanish I (1 credit)

Spanish I is a comprehensive first look at the basic vocabulary, simple grammar structures and cultural aspects that encompass the Spanish-speaking world. Students develop skills in reading, writing, listening and speaking. Students are expected to master basic conversational skills.

Spanish I Honors (1 credit)

Spanish I Honors is a comprehensive first look at the vocabulary, grammar structures and cultural aspects that encompass the Spanish-speaking world. The student builds on the basics: reading, writing, listening and speaking. The teacher uses the target language to facilitate the class and goes beyond the book to expand on certain areas. **Students are required to speak in the target language, and are expected to participate in every class.** Students will read a small novel in the second semester and complete a Standards portfolio the first, second, and third nine weeks, and a Standards video the fourth nine weeks.

Spanish II (1 credit)

This course is offered to students who have had one year of high school Spanish or three or more years of Spanish in elementary school and have passed a placement test for second year Spanish. The course continues to develop the important skills of listening, reading, writing and speaking. Students are further exposed to the culture of Spanish-speaking countries through different media.

Spanish II Honors (1 credit)

This course is offered to students who have had one year of high school Spanish or three or more years of Spanish in elementary school and have passed a placement test for second year Spanish. Reading, writing and listening skills are further developed in this course. **The class is primarily taught in the target language, and the students are required to speak in the target language and to participate in every class.** The culture of several Spanish-speaking countries is researched in depth through film and literature. Students are also required to read a novel.

Spanish III (1 credit)

Spanish III is an elective course for students who complete Spanish I and Spanish II. For students who take Spanish II in ninth grade, Spanish III is a required course. The course stresses communication in the target language. Students advance their skills in reading, writing, speaking and listening.

Spanish III Honors (1 credit)

In addition to the requirements of Spanish III, the honors course focuses more on listening and speaking. Grammar in this course covers all tenses and the subjunctive mood. Literature, as well as current issues taken from various media, are used to enhance the students' communication skills. Culture is studied more extensively through art, history, and film. Students in this class are required to read a novel from the Spanish Golden Era.

Spanish IV Honors (1 credit)

This course is offered to students who have completed three years of high school Spanish. Spanish IV Honors is a continuation of Spanish III Honors. Reading, writing, and listening skills are further developed in this course. The class is primarily taught in the target language, and the students are required to speak in the target language. Students are expected to participate in every class. The culture of several Spanish-speaking countries is researched in depth through film and literature. Students are also required to read a novel.

Spanish V Honors (½ credit or 1 credit)

This course is offered to students who have had four years of high school Spanish. Students expand vocabulary and develop flexibility and proficiency by means of extensive conversation. This course may be taken for a half or whole credit. Students develop reading, speaking, and writing skills, and expand their active vocabulary. The readings (which explore economic development, education, environment, politics, and social institutions in Latin America) are the core of the course, serving as the basis for class discussion and for the selective review of grammar.

Spanish V Advanced Placement (1 credit)

This course is offered to students that have completed four years of high school Spanish. Students will further develop their proficiency in listening comprehension, speaking, reading and writing. The course emphasizes active communication skills that are useful in themselves and that can be applied to various activities and disciplines. Extensive training in the organization and writing of compositions are an important part of this course. Films, newspapers, and magazines are used to explore different Spanish and Latin cultures and literature. Students are required to take the AP exam at the end of the course. Students must complete IV Honors in order to enroll in this course.

French I (1 credit)

French I introduces students to the four skills of language learning: reading, writing, listening and speaking. Students study basic vocabulary, grammar, functional expressions and culture. Classroom activities focus on vocabulary recognition, comprehension and simple communication in French.

French I Honors (1 credit)

French I Honors is a comprehensive first look at the vocabulary, grammar structures and cultural aspects that encompass the French-speaking world. The student builds on the basics: reading, writing, listening and speaking. The teacher uses the target language to facilitate the class. **Students are required to speak in the target language and are expected to participate in every class.** Students will read a short novel in the second semester.

French II (1 credit)

This course is offered to students who have had one year of high school French or three or more years of French in elementary school and have passed a placement test for second year French. French II builds on the initial vocabulary and grammar learned in French I. This course explores the geography and history of French-speaking countries as well as additional cultural topics. **Emphasis on reading, writing, speaking and listening at this level encourages students to communicate in French.**

French II Honors (1 credit)

This course is offered to students who have had one year of high school French or three or more years of French in elementary school and have passed a placement test for second year French. French II Honors engages students in an accelerated pace of language learning and usage. Students enhance their skills of reading, writing, listening and speaking. **The class is primarily taught in the target language and the students are required to speak in the target language and to participate in every class.** The class will read a novel and explore advanced cultural topics.

French III (1 credit)

French III has as prerequisites successful completion of French I and French II. Eighth graders enrolled in French I are required to take French II and French III. Students who enter in the ninth grade with a credit in French I are required to take French II and French III. The course stresses communication in the target language. Students utilize listening, speaking, reading and writing skills along with a study of French culture.

French III Honors (1 credit)

In addition to the requirements of French III, the honors course focuses more on listening and speaking. This course stresses reading and writing skills through the use of journals and class assignments. Supplemental reading will include excerpts from plays and short stories. Grammar in French III covers all tenses, including the subjunctive mood. A more advanced grasp of idioms and an enriched vocabulary are also explored.

French IV Honors (1 credit or ½ credit)

This course is offered to students who have successfully completed French III. French IV emphasizes the perfecting of communication in the target language. The course stresses everyday conversational French, vocabulary role-playing, listening skills, culture and grammar. Students will study all complex tenses and sentence structures and will be required to read a novel.

Latin I Honors (1 credit)

Latin I is offered at the honors level only. The objective of this beginner's course is to bring students quickly to the point where they can read continuous Latin prose. Emphasis is placed on the mastery of basic vocabulary and grammar (e.g., mastery of the five declensions and the tenses of the indicative mood).

The textbook readings are based on stories from classical sources which enable the students to learn something of Roman mythology, history, and culture. The course includes the study of the influence of

Latin on the English language in order to strengthen vocabulary skills in both languages.

Latin II Honors (1 credit)

The objective of Latin II is to expand the students' command of vocabulary, grammar, and idiom. The nature of the textbook readings ensures that students continue to develop their understanding of the cultural background of the Romans as well as furthering their mastery of formal grammar, syntax and style. Students also read Caesar in original Latin.

Latin III Honors (1 credit)

Latin III is an elective course for students who take Latin I in the ninth grade and Latin II in the tenth grade. For students who take Latin II in ninth grade, Latin III is a required course.

Latin III is an elective honors course. The objective of Latin III is to complete the students' understanding of grammatical constructions that will prepare them to meet original Latin texts. The second half of the textbook is composed entirely of selections from Cicero, Petronius, Pliny and others which allows students to examine what the Romans had to say about themselves, their society, their politics and history.

Latin IV Honors (1 credit or ½ credit)

Latin IV is an elective honors course. The objective of this course is to enrich the students' understanding of the Roman world through continued study of major authors. In particular, the student will examine, in some detail, selected passages from the poets Virgil, Ovid, Catullus and Horace.

HEALTH & PHYSICAL EDUCATION

Course Offerings:

HEALTH & PHYSICAL EDUCATION 8

PHYSICAL EDUCATION I (9th and 10th Grades)

PHYSICAL EDUCATION II (11th and 12th Grades)

The Health and Physical Education Department provides students with a foundation for academic growth, an opportunity to achieve optimal health, physical fitness, and skill development. Our ultimate goal is to inspire students to become life-long movers.

Mount Carmel students are required to take one semester of Health & Physical Education each year.

The health program is not separate from the physical education program but rather offered in conjunction with it. Units are planned and incorporated into the physical education activity in order that a relationship is established. Isolated units are strategically planned within the school year to reinforce particular topics requiring special emphasis. The Health & Physical Education Department provides the following activities for each student during her four years of high school.

Physical Education

In one year at Mount Carmel Academy, students are given three physical activity tests (with a focus on rules and strategies) and approximately three health tests. The Physical Education curriculum includes:

Physical Activity

Badminton • Basketball
Golf • Field Hockey
Flag Football • Indoorball • Lacrosse
Physical Fitness • Pickleball • Ping Pong
Soccer • Tinikling • Volleyball • Weight Lifting

Health

First Aid & CPR
Sexually Transmitted Diseases
AIDS
Cancer in Women
Stress Management
Personal Safety
Louisiana Community Health

MATHEMATICS

Algebra I, Geometry, and Algebra II are required for all students.

Algebra I (1 credit)

Algebra I consists of the basic language of Algebra, properties of real numbers, solving linear equations, graphing linear equations and functions, writing linear equations, solving and graphing linear inequalities, systems of linear equations, exponents and scientific notation, polynomials and factoring, and rational expressions.

Algebra I Honors (1 credit)

Algebra I Honors is designed to enable students to translate mathematical statements into English and to translate descriptions of mathematical situations into mathematical statements. Applications of Algebra to various science situations and life situations are an essential aspect of the course.

Algebra II (1 credit)

This course picks up where Algebra I leaves off. It covers real number operations, solving linear equations and inequalities in one and two variables, solving absolute value equations and inequalities, absolute value functions, slope, writing equations of lines, correlation and best fit lines, systems of linear equations and inequalities in two variables, matrix operations in two variables, graphing quadratic

functions, solving quadratic functions by factoring, completing the square, finding the square root, and using the quadratic formula, complex numbers, polynomial functions, rational exponents, inverse functions, radical equations, square and cube root functions, rational expressions, complex fractions and conic sections.

Algebra II Honors (1 credit)

This honors course contains all of the topics in Algebra II in addition to piecewise functions, systems of linear equations in three variables, matrix operations in three variables. The course is designed to motivate students to apply the basic skills in a problem solving approach and to ultimately prepare them for Calculus.

Geometry (1 credit)

This course consists of learning the basic terminology of geometry in two and three dimensions, reasoning and proofs, perpendicular and parallel lines, congruent triangles, properties of triangles, quadrilaterals, transformations, vectors, similarity, right triangles, trigonometric ratios, circles, area of polygons and circles, surface area and volume, and coordinate geometry.

Geometry Honors (1 credit)

The emphasis in the course is on the reasoning process required to do mathematical proofs. All topics are taught from the aspect of proving the statements true, and requires thorough knowledge of the definitions, postulates, and theories in Geometry.

Advanced Math I (1 credit)

Algebra II is a pre-requisite for 11th & 12th grades.

Students learn radian and degree measure, right triangle trigonometry, the unit circle, trigonometric functions of any angle, graphs of sine and cosine with transformations, graphs of the other trigonometric functions, inverse trig functions, using the fundamental identities, verifying fundamental identities, solving trigonometric equations, law of sines and cosines, the area of a triangle, exponential and logarithmic functions, sequences and series.

Advanced Math I Honors (1 credit)

Algebra II Honors is a pre-requisite for 11th & 12th grades).

This course includes all of the topics covered in Analysis and Trigonometry. Additional topics for the course are harmonic motion, sum and difference identities, double and half angle identities, sequences and series, conic sections, binomial theorem and factorials, permutations and combinations, and probability and odds.

Probability and Statistics (1 credit)

Probability and Statistics is an optional course for seniors. This course includes permutations, combinations, probability; probability distributions, including binomial and normal distributions; analysis of data, measures of central tendency and variability; random variables; random sampling; central limit theorem; confidence intervals; hypothesis testing, and curve fitting. The course will include both descriptive and inferential statistics and will make connections between statistical information and probability concepts. These concepts will also be applied in real world situations.

Calculus (1 credit)

This course, for 12th grade only, is designed for non-math/science college majors.

This course begins with a review of some basic mathematical topics such as solving equations and inequalities, graphs of equations, writing linear equations, function transformation, composition of functions, polynomial functions and complex numbers. The remaining topics include finding and evaluating limits, one-sided limits, definition of a derivative, basic differentiation rules, related rates, implicit differentiation, extrema, concavity, curve sketching, optimization problems, and integration.

Calculus Honors (1 credit)

This course, for 12th grade only, is designed for potential math/science college majors.

This course begins with a brief review of the Cartesian plane, functions, lines and trigonometry. The remaining topics include properties and evaluation techniques of limits, definition of a derivative, rules for derivation, velocity, acceleration and implicit differentiation, related rates, extrema, concavity, curve sketching, optimization problems, differentials, integration, Riemann sums, integration and differentiation of natural log functions and exponential functions, growth and decay, area between curves and volume. This course is designed to motivate students to apply the basic skills in a problem solving approach.

Calculus Advanced Placement (1 credit)

This course, for 12th grade only, is designed for potential math/science college majors wanting to earn hours in college math.

This course covers all material prescribed by the College Board in preparation for the AP Calculus AB exam in May. Students taking this course should expect to work at least one hour a night studying and preparing for the course. Also, extra study sessions may be called, if needed, to review for the exam. Additional topics are required above and beyond the Honors Calculus curriculum.

RELIGION

Religion 8 (Required)

The eighth grade program introduces the student to the history and traditions of Carmel. The course offers an overview of Catholic doctrines and teachings, laying a foundation on which all subsequent religion courses are built. Amidst a prayer-filled atmosphere, the student is encouraged to deepen her relationship with Jesus through prayer and Scripture.

Religion I (Required)

The freshman curriculum welcomes students to the Carmel way of life with a study of Carmel history and spirituality. The curriculum continues with a closer look at the life of Jesus and basic teachings of the Catholic Church as seen through the Creed and Christian Scriptures. Students are encouraged to know Jesus as friend, brother, and Savior and to grow in awareness of themselves as Christian young women. Within this context, the study of human sexuality seeks to affirm and strengthen their commitment to living chaste and moral lives.

Religion II (Required)

The first semester of the sophomore course examines the Hebrew Scriptures in order to provide a deeper understanding of Christian roots and a greater appreciation of the people of faith in salvation history. Christian Morality, a study about moral decision making, is an essential part of the second semester curriculum. The course is rooted in Sacred Scripture and Church teaching and encourages the student's moral growth through application of these teachings to daily life.

Religion III (Required)

The first semester of junior year, students explore Catholicism so they might come to a deeper appreciation of what it means to live as a member of the body of Christ. Particular attention is given to liturgy and sacraments. The second semester builds on this identity with a study of how the Gospel and church teaching call us to actively work for justice in the world, respect and defend life, and practice responsible stewardship.

Religion IV (Required)

First semester senior level religion focuses on a comprehensive study of the history and legacy of our church beginning with our Jewish roots and culminating with a Catholic proclamation of Jesus as the center of Christianity. The second semester curriculum introduces various and varied Christian vocations—married, single, and/or religious lives—to which we are called. This course on Christian lifestyles aims to increase student awareness that God's call is both personal and unique and involves a commitment to love Him and others.

SCIENCE

Physical Science—8th Grade (only), Biology, Chemistry, and Physics are required for all students.

Physical Science--8th grade (1 credit)

This lecture/laboratory course will build a conceptual and computational foundation in physics and chemistry. Understanding and use of the metric system, significant digits, scientific notation, graphical analysis and problem solving will be emphasized.

Physical Science—8th Grade Honors (1 credit)

This in-depth lecture/laboratory course will build a conceptual and computational foundation in physical and chemistry, with an emphasis on mathematical applications. Understanding and use of the metric system, significant digits, scientific notation, graphical analysis and problem solving, will be emphasized. The honors students are required to analyze data, think analytically and draw conclusions through laboratory exercises. Students will learn about the laws that govern the physical world and develop an appreciation for the order of the universe.

Biology I (1 credit)

This course presents an introduction to major biological topics ranging from molecular foundations to topics dealing with the complexity of the human body. Through reading, written assignments, class discussions, computer-related activities, and laboratory exercises, the student becomes familiar with such concepts as the cell, genetics, evolution, ecology, the plant and animal kingdom, animal development, and the anatomy and physiology of the human body.

Biology I Honors (1 credit)

This honors course offers a challenging study of the major biological concepts ranging from molecular foundations to animal and plant physiology, with particular emphasis on the detail of the human body, genetics and advanced laboratory experiments beyond the regular biology curriculum. The honors students are required to analyze data, think analytically and draw conclusions through laboratory exercises, computer-related activities, class discussion, written assignments, and reading assignments. The honors course completes more biology chapters and experiments at an accelerated pace.

Chemistry I (1 credit)

This course is a basic, introductory course with laboratory investigation. Topics covered include matter and energy, measurement and accuracy,

gases, quantum theory, the periodic table, chemical bonding, chemical reactions, and calculations.

Chemistry I Honors (1 credit)

This honors course is an introductory chemistry course with laboratory investigation. Topics covered include matter and energy, measurement and accuracy, gas equations, quantum theory, the periodic table, chemical bonding, molecular geometry, chemical reactions, and calculations. The course includes in-depth analysis of chemical concepts, extensive laboratory work, and an emphasis on chemical computations.

Physics I (1 credit)

This course offers the student a basic laboratory experience of physical science. Topics covered include measurement, graphing, interpretation of experimental data, motion on earth and in the heavens, force, work, energy, thermodynamics, waves, light, and optics.

Physics I Honors (1 credit)

This course offers the student an extensive in-depth laboratory experience of physical science. Students will be required to demonstrate a higher order of critical thinking, with in-depth real life applications. Topics covered include measurement, graphing, interpretation of experimental data, motion on earth and in the heavens, force, work, machines, energy, thermodynamics, waves, light, and optics with applications.

Science Electives

Biology II (1 credit)*

This course is an honors credit course designed for experienced science students who have taken Chemistry I and plan to enter a science-related field. College level material is covered and includes cell and molecular biology, human anatomy and physiology, plant and animal surveys, genetics and evolution. Laboratory activities accompany the units.

Chemistry II (1 credit)*

This course is an honors credit course which treats the topics of chemical bonding, molecular structure, basic organic chemistry, gases, solutions, acid-base theory, thermochemistry and redox reactions. Individual laboratory work is an integral part of the course.

Physics II (½ credit)*

This course will offer an additional semester of honors physics to those who may be interested in pursuing a science curriculum in college. This course will offer laboratory experience. Topics covered will include electric currents, circuits, magnetism, quantum theory and nuclear physics.

***Upper-level courses are offered if there are adequate numbers of students requesting the course.**

SOCIAL STUDIES

World Geography, World History, American History, Civics and Economics are required courses. All other courses are elective courses.

World Geography (1 credit)

World Geography is designed for the student to become aware of the geographical regions of the world, the principles of physical geography, the problems of developing nations, and to understand how cultures of different nations affect lifestyle, government and social structures.

World Geography Honors (1 credit)

Honors level students are expected to meet all the normal requirements for the World Geography course. In concert with this, Geography Honors students move through course material at a more rapid pace and performance assessments require more writing and critical thinking components.

World History (1 credit)

World History consists of a chronological study of world civilizations beginning with early humans through the present. The course includes eastern civilizations as well as western civilizations. Added emphasis is placed on map skills, writing assignments and computer lessons as a means of conveying information to students. Students are required to read one supplemental book.

World History Honors (1 credit)

In addition to the regular World History curriculum, the World History Honors curriculum includes an additional supplemental reading book, an honors project, and added emphasis on writing, both on tests and in the form of out-of-class assignments. Essays in the honors-level course require students to analyze and synthesize information.

World History Advanced Placement (1 credit)

Students will develop a greater understanding of the evolution of global processes and contacts, in interaction with different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. The course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. The course emphasizes relevant factual knowledge deployed in conjunction with leading interpretive issues and types of historical evidence. The course builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage. Periodization, explicitly discussed, forms an organizing principle for dealing

with change and continuity throughout the course. Specific themes provide further organization to the course, along with the consistent attention to contacts among societies that form the core of world history as a field of study. These objectives will prepare you to pass the Advanced Placement Test in May.

American History (1 credit)

American History consists of a chronological study of the American experience from exploration of the new world to the present. Emphasis in the course is placed on social history, economics, and the evolution of American institutions. Students are required to read three (3) supplemental books.

American History Honors (1 credit)

This honors course focuses on a critical thinking curriculum. Students are required to apply knowledge learned in class to analytical essays on assessments, homework, and projects. Performance assessments require idea development and analytical thinking. Students are required to read four (4) supplemental books. Students interested in taking American History Honors should be confident in their ability to write and think critically. Exposure to other honors classes may be helpful, but is not required.

American History—Advanced Placement (1 credit)

This course should be taken if the student wishes to earn college credit.

American History—Advanced Placement includes the equivalent of a full-year college course and offers the student the opportunity for advanced placement in college after the successful completion of the Advanced Placement Examination given in May. The course consists of a chronological study of the American experience from colonial America to the present with special attention to the complexities of the American past. The story of the past becomes more comprehensible when attention is paid to how the major figures in history have related to events and to one another. Emphasis is given to political cartoon interpretations and analytical thinking techniques in writing comparative essays.

Civics (1 credit)

Civics consists of a study of United States government institutions with a comparative study of governmental systems of other leading nations in the world. The course stresses that "good government" is best served when people know, understand and actively participate in the governmental process. Focus is also placed on relevant current government issues and personality profiles of men and women who contributed significantly to the development of government in the United States.

Civics Honors (1 credit)

While core material remains the same in honors, assessments are substantively more difficult, featuring special emphasis on higher-level thinking skills. Assessments frequently incorporate expository and persuasive writing activities. In addition, honors students read one additional book (currently Douglas Brinkley's *The Majic Bus: An American Odyssey*) and must complete one of three projects involving grassroots participation in the democratic process.

United States Government and Politics—

Advanced Placement (1 credit)

This course should be taken if the student wishes to earn college credit.

This course includes the equivalent of a full-year college course on Introduction to American Government or Political Science. The course is designed to increase your understanding of the American political system, its framework, traditions, and values. It covers the nature of American Politics, its development over the past two hundred years, and how it functions today at the beginning of the twenty-first century through an examination of the principle processes. Also, of primary concern will be the understanding of the making and implementation of public policy. These objectives will prepare you to pass the Advanced Placement Test in May.

Economics (½ credit)

This course is designed to provide a foundation to understand both the social science of economics and the everyday economic world. The course is built both around a theoretical and personal approach. The basic topics called for by the National Task Force on Economics are given full consideration.

Economics Honors (½ credit)

Economics Honors students will be required to learn course material at an accelerated pace. To this end, units will be taught in greater depth at the honors level. In addition to this, the honors students will be assigned a cumulative honors project, which will be due at the end of the academic semester. Additional outside readings will be required. Major and minor assessments will involve higher-level thinking skills and real world applications.

Social Studies Electives

Contemporary Issues (½ credit)

This course is designed to help students become more aware and involved in current world and local affairs. Students are required to watch television news programs, read the newspaper, read a weekly news magazine, and obtain current news from the Internet.. Daily discussions and reading help students form constructive, informative opinions about the happenings that occur in the world.

Law Studies (½ credit)

This course is designed to provide the student with an understanding of the judicial system in the United States. In the course the student explores practical steps that can be taken to protect her rights as a citizen, consumer, worker, witness or family member. The study includes legal topics that have contemporary relevance and encourages the student to grapple with alternatives and possible resolutions of issues.

Psychology (1 credit or ½ credit)

This course is designed to give an overall introduction of the elementary principles of human behavior. The course includes such topics as psychobiological processes, sensation and perception, consciousness, learning, memory, intelligence, development, personality, psychological disorders, history of psychology, research methods, motivation and emotion, stress and conflict.

Sociology (½ credit) (10th, 11th, & 12th graders)

This course is the study of social action and social organization in human societies. Focus is placed on looking beyond individualistic and psychological explanations for behavior to the broader patterns that explain how individuals act in society. Topics include the sociological perspective, methods of sociological research, culture, family structure, the socialization process, crime, race, ethnicity and gender issues, education, religion, war, social movements and social change.

Women's History (½ credit)

(Elective)

The course of Women's History will cover the struggle and success of women in world history. The course will be half credit spanning one semester. The content will span from the creation story to the modern lives of women around the world. The course will give emphasis to the struggle for acquisition of equal social and legal status for women. The course is designed to provide the students a greater appreciation for the rights and abilities they are afforded in our modern era and an understanding of the burden of gender discrimination faced by women around the world. The course will conclude with a look at the role of women in our Church and our devotion to the Blessed Mother.